## IC 14-34-10

## **Chapter 10. Performance Standards**

#### IC 14-34-10-1

# "Approximate original contour" defined

- Sec. 1. As used in this chapter, "approximate original contour" means the surface configuration achieved by backfilling and grading of the mined area so that the reclaimed area, including terracing or access roads:
  - (1) closely resembles the general surface configuration of the land before mining; and
  - (2) blends into and complements the drainage pattern of the surrounding terrain, with all highwalls and spoil piles eliminated except for the following:
    - (A) Water impoundments that comply with section 2(b)(11) of this chapter.
    - (B) Boxcut spoil areas that are:
      - (i) specifically designed to provide alternative land uses; and
      - (ii) permitted by the director.

As added by P.L.1-1995, SEC.27.

# IC 14-34-10-2

# **Duties of permittee**

- Sec. 2. (a) As used in this section, "higher or better uses" means postmining land uses that have a higher:
  - (1) economic value; or
  - (2) nonmonetary benefit;

to the landowner or the community than the premining land uses.

- (b) In addition to other standards a permittee must meet under rules of the commission, a permittee shall do the following:
  - (1) Place markers on the site to readily identify the permit area.
  - (2) Conduct the surface coal mining operation in a manner that maximizes the use and conservation of the solid fuel resource that is recovered so that reaffecting the land in the future through surface coal mining is minimized.
  - (3) Restore the land affected to a condition capable of supporting the uses that the land was capable of supporting before mining or higher or better uses of which there is a reasonable likelihood if:
    - (A) those uses do not:
      - (i) present an actual or a probable hazard to public health or safety; or
      - (ii) pose an actual or a probable threat of water diminution or pollution; and
    - (B) the permit applicant's declared proposed land use following reclamation:
      - (i) is not impractical or unreasonable;
      - (ii) is not inconsistent with applicable land use policies and plans;

- (iii) does not involve unreasonable delay in implementation; or
- (iv) does not violate federal, state, or local law.
- (4) Except as provided in subdivisions (5) and (6) and section 4 of this chapter with respect to all surface coal mining operations backfill, compact where advisable to ensure stability or prevent the leaching of toxic materials, and grade to restore the approximate original contour of the land with all highwalls, spoil piles, and depressions eliminated. Small depressions are allowed if needed to retain moisture to assist revegetation or as otherwise authorized under this article.
- (5) In a surface coal mining operation that:
  - (A) is carried out at the same location over a substantial time:
  - (B) transects the coal deposit and the thickness of the coal deposit relative to the volume of the overburden that is large; and
  - (C) has overburden and other spoil and waste materials at a particular point in the permit area or otherwise available from the entire permit area that is insufficient, giving due consideration to volumetric expansion, to restore the approximate original contour;

the operator, at a minimum, shall backfill, grade, and compact, where advisable, using all available overburden and other spoil and waste materials to attain the lowest practicable grade but not more than the angle of repose to provide adequate drainage and to cover all acid-forming and other toxic materials to achieve an ecologically sound land use compatible with the surrounding region.

- (6) If in surface coal mining:
  - (A) the volume of overburden is large relative to the thickness of the coal deposit; and
  - (B) the operator demonstrates that due to volumetric expansion the amount of overburden and other spoil and waste materials removed in the course of the mining operation is more than sufficient to restore the approximate original contour;

the operator shall, after restoring the approximate contour, backfill, grade, and compact, where advisable, the excess overburden and other spoil and waste materials to attain the lowest grade but not more than the angle of repose and to cover all acid-forming and other toxic materials to achieve an ecologically sound land use compatible with the surrounding region. The overburden or spoil shall be shaped and graded in a way that prevents slides, erosion, and water pollution and revegetated in accordance with the requirements of this article. (7) Stabilize and protect all surface areas, including spoil piles, affected by the surface coal mining and reclamation operation to effectively control erosion and attendant air and water pollution.

- (8) Remove the topsoil from the land in a separate layer and:
  - (A) replace the topsoil on the backfill area; or
  - (B) if the topsoil is not used immediately;
    - (i) segregate the topsoil in a separate pile from other spoil; and
    - (ii) if the topsoil is not replaced on a backfill area within a time short enough to avoid deterioration of the topsoil, maintain a successful cover by quick growing plants or other means so that the topsoil is preserved from wind and water erosion, remains free of any contamination by other acid or toxic material, and is in a usable condition for sustaining vegetation when restored during reclamation.

However, if the topsoil is of insufficient quantity or of poor quality to sustain vegetation or if other strata are more suitable for vegetation requirements, the operator shall remove, segregate, and preserve, in a like manner, the strata that are best able to support vegetation.

- (9) Restore the topsoil or the best available subsoil that is best able to support vegetation.
- (10) For all prime farmland as identified in IC 14-34-3-3(16), comply with the specifications for soil removal, storage, replacement, and reconstruction established by rules of the commission and do the following:
  - (A) Segregate the A horizon of the natural soil unless it is shown that other available soil materials will create a final soil that has a greater productive capacity, stockpile this material, if not used immediately, separately from other spoil, and provide needed protection from wind and water erosion or contamination by other acid or toxic material.
  - (B) Segregate the B horizon of the natural soil, or underlying C horizons or other strata, or a combination of those horizons or other strata that are texturally and chemically suitable for plant growth and equal to or more favorable for plant growth than the B horizon, in sufficient quantities to create in the regraded final soil a root zone of comparable depth and quality to that existing in the natural soil, stockpile this material, if not used immediately, separately from other spoil, and provide needed protection from wind and water erosion or contamination by other acid or toxic material
  - (C) Replace and regrade the root zone material described in clause (B) with proper compaction and uniform depth over the regraded spoil material.
  - (D) Redistribute and grade in a uniform manner the surface soil horizon described in clause (A).
- (11) Create, if authorized in the approved surface coal mining and reclamation plan, permanent impoundments of water on mining sites. The permittee may create the permanent impoundment only after the permittee demonstrates the following:

- (A) The size of the impoundment is adequate for the intended purposes.
- (B) The impoundment dam construction will be designed to achieve necessary stability with an adequate margin of safety compatible with that of structures constructed under 16 U.S.C. 1006.
- (C) The quality of impounded water will be suitable, on a permanent basis, for the intended use and discharges from the impoundment will not degrade the water quality below water quality standards established under applicable federal and state law in the receiving stream.
- (D) The level of water will be reasonably stable.
- (E) Final grading will provide adequate safety and access for proposed water users.
- (F) The water impoundments will not result in the diminution of the quality or quantity of water used by adjacent or surrounding landowners for agricultural, industrial, recreational, or domestic uses.
- (12) Conduct an augering operation associated with surface coal mining in a manner that maximizes the recoverability of mineral reserves remaining after the surface coal mining and reclamation operation is complete and seal all auger holes with an impervious and noncombustible material to prevent drainage except where the director determines that the resulting impoundment of water in those auger holes may create a hazard to the environment or the public health or safety. The director may prohibit augering if necessary to:
  - (A) maximize the use, recoverability, or conservation of the solid fuel resources; or
  - (B) protect against adverse water quality impacts.
- (13) Minimize disturbances to the prevailing hydrologic balance at the mine site and associated offsite areas and to the quality and quantity of water in surface and ground water systems during and after surface coal mining and reclamation operations by doing the following:
  - (A) Avoiding acid or other toxic mine drainage by measures such as the following:
    - (i) Preventing or removing water from contact with toxic-producing deposits.
    - (ii) Treating drainage to reduce toxic content that adversely affects downstream water upon being released to watercourses.
    - (iii) Casing, sealing, or otherwise managing boreholes, shafts, and wells and keep acid or other toxic drainage from entering ground and surface water.
  - (B) Conducting surface coal mining and reclamation operations so as to prevent, to the extent possible using the best technology currently available, violations of the effluent limitations for coal mining operations established under applicable state or federal law.

- (C) Constructing siltation structures under clause (B) before commencement of surface coal mining operations that will be certified by an engineer licensed under IC 25-31 and constructed as designed and approved in the reclamation plan.
- (D) Cleaning out and removing temporary or large settling ponds or other siltation structures from drainageways after disturbed areas are revegetated and stabilized and depositing the silt and debris at a site and in a manner approved by the director.
- (E) Restoring recharge capacity of the mined area to approximate premining conditions.
- (F) Avoiding channel deepening or enlargement in operations requiring the discharge of water from mines.
- (G) Other actions required under the permit.
- (14) With respect to surface disposal of mine wastes, tailings, coal processing wastes, and other wastes in areas other than the mine workings or excavations, the following:
  - (A) Stabilize all waste piles in designated areas through construction in compacted layers, including the use of incombustible and impervious materials if necessary.
  - (B) Assure the following:
    - (i) The final contour of the waste pile will be compatible with natural surroundings.
    - (ii) The site will be stabilized and revegetated according to this article.
- (15) Refrain from surface coal mining within five hundred (500) feet of active and abandoned underground mines to prevent breakthroughs and to protect the health or safety of miners. However, the director shall permit an operator to mine near, through, or partially through an abandoned underground mine or closer to an active underground mine if the following conditions exist:
  - (A) The nature, timing, and sequencing of the approximate coincidence of specific coal surface mining activities with specific underground coal mining activities are jointly approved by the regulatory authorities concerned with surface coal mining regulation and the health and safety of underground miners.
  - (B) The operations will result in:
    - (i) improved resource recovery;
    - (ii) abatement of water pollution; or
    - (iii) elimination of hazards to the health and safety of the public.
- (16) Design, locate, construct, operate, maintain, enlarge, modify, and remove or abandon, in accordance with the standards and criteria used by the United States Secretary of the Interior to ensure that flood control structures are safe and effectively perform their functions, all existing and new coal mine waste piles:

- (A) consisting of:
  - (i) mine wastes;
  - (ii) tailings;
  - (iii) coal processing wastes; or
  - (iv) other liquid and solid wastes; and
- (B) used temporarily or permanently as dams or embankments.
- (17) Ensure the following:
  - (A) All debris, acid-forming materials, toxic materials, or materials constituting a fire hazard are treated, buried, and compacted or otherwise disposed of in a manner designed to prevent contamination of ground or surface water.
  - (B) Contingency plans are developed to prevent sustained combustion.
- (18) Ensure that explosives are used only in accordance with the following:
  - (A) IC 14-34-12.
  - (B) Applicable state and federal law.
  - (C) The rules adopted by the commission.
- (19) Ensure that all reclamation efforts proceed in an environmentally sound manner and as contemporaneously as practicable with the surface coal mining operations. However, if the applicant proposes to combine surface coal mining operations with underground coal mining operations to assure maximum practical recovery of the mineral resources, the director may grant a variance for specific areas within the reclamation plan from the requirement that reclamation efforts proceed as contemporaneously as practicable and permit underground coal mining operations before reclamation if the following conditions are met:
  - (A) The director finds in writing the following:
    - (i) The applicant has presented, as part of the permit application, specific, feasible plans for the proposed underground mining operations.
    - (ii) The proposed underground mining operations are necessary or desirable to assure maximum practical recovery of the mineral resource and will avoid multiple disturbance of the surface.
    - (iii) The applicant has satisfactorily demonstrated that the plan for the underground coal mining operations conforms to the requirements for underground coal mining in that jurisdiction and that permits necessary for the underground coal mining operations have been issued by the appropriate authority.
    - (iv) The applicant has shown the areas proposed for the variance are necessary for the implementation of the proposed underground coal mining operations.
    - (v) Substantial adverse environmental damage, either onsite or offsite, will not result from the delay in completion of reclamation as required by this article.

- (vi) The provisions for the offsite storage of spoil will comply with subdivision (25).
- (B) The commission has adopted specific rules to govern the granting of variances in accordance with this subdivision.
- (C) Variances granted under this subdivision are to be reviewed by the director not more than three (3) years from the date of issuance of the permit.
- (D) Liability under the bond filed by the applicant with the director under IC 14-34-6 is for the duration of underground coal mining operations and until the requirements of this section and IC 14-34-6 are fully complied with.
- (20) Ensure that the construction, maintenance, and postmining conditions of access roads into and across the site of operations will control or prevent the following:
  - (A) Erosion and siltation.
  - (B) Pollution of water.
  - (C) Damage to the following:
    - (i) Fish or wildlife or their habitat.
    - (ii) Public or private property.
- (21) Refrain from the construction of roads or other access ways:
  - (A) up a stream bed or drainage channel; or
- (B) in the proximity of a channel;

that seriously alters the normal flow of water.

- (22) Establish on the regraded areas and all other land affected a diverse, an effective, and a permanent vegetative cover:
  - (A) of the same seasonal variety native to the area of land to be affected; and
  - (B) that is capable of self-regeneration and plant succession at least equal in extent of cover to the natural vegetation of the area.

However, an introduced species may be used in the revegetation process where desirable and necessary to achieve the approved postmining land use plan.

- (23) Assume the responsibility for successful revegetation, as required by subdivision (22), as follows:
  - (A) On lands not eligible for remining, for five (5) full years after the last year of augmented seeding, fertilizing, irrigation, or other work to assure compliance with subdivision (22). However, if the director approves a long term intensive agricultural postmining land use, the applicable five (5) or ten (10) year period of responsibility for revegetation commences at the date of initial planting for the long term intensive agricultural postmining land use. If the director issues a written finding approving a long term intensive agricultural postmining land use as part of the mining and reclamation plan, the director may grant exception to subdivision (22).
  - (B) On lands eligible for remining, for two (2) full years after the last year of augmented seeding, fertilizing,

- irrigation, or other work in order to ensure compliance with subdivision (22).
- (24) Protect offsite areas from slides or damage occurring during the surface coal mining and reclamation operations and not deposit spoil material or locate any part of the operations or waste accumulations outside the permit area.
- (25) Place all excess spoil material resulting from coal surface mining and reclamation activities to ensure the following:
  - (A) Spoil is transported and placed in a controlled manner in a position for concurrent compaction and in a manner that assures mass stability and prevents mass movement.
  - (B) The areas of disposal are within the bonded permit areas and all organic matter is removed immediately before spoil placement.
  - (C) Appropriate surface and internal drainage systems and diversion ditches are used in a manner that prevents spoil erosion and movement.
  - (D) The disposal area does not contain springs, natural watercourses, or wet weather seeps unless lateral drains are constructed from the wet areas to the main underdrains in a manner that prevents filtration of the water into the spoil pile.
  - (E) If placed on a slope, the spoil is placed as follows:
    - (i) On the most moderate slope among the slopes on which, in the judgment of the director, the spoil could be placed in compliance with all the requirements of this article.
    - (ii) If possible, upon or above a natural terrace, bench, or berm if the placement provides additional stability and prevents mass movement.
  - (F) Where the toe of the spoil rests on a downslope, a rock toe buttress of sufficient size to prevent mass movement is constructed.
  - (G) The final configuration is compatible with the natural drainage pattern and surroundings and suitable for intended uses.
  - (H) Design of the spoil disposal area is certified by an engineer licensed under IC 25-31 and in conformance with professional standards.
  - (I) All other provisions of this article are met.
- (26) To the extent possible using the best technology currently available the following:
  - (A) Minimize disturbances and adverse impacts of the operation on fish, wildlife, and related environmental values.
  - (B) Enhance those resources where practicable.
- (27) Provide for an undisturbed natural barrier:
  - (A) beginning at the elevation of the lowest coal seam to be mined; and
  - (B) extending from the outslope for a distance determined by the director;

to serve as a barrier to slides and erosion.

- (28) Replace the water supply of an owner of interest in real property who obtains all or part of the owner's supply of water for domestic, agricultural, industrial, or other legitimate use from an underground or a surface source if the supply is affected by contamination, diminution, or interruption proximately resulting from the surface coal mine operation. This article does not affect the right of a person to enforce or protect under applicable law the person's interest in water resources affected by a surface coal mining operation.
- (29) Meet other criteria that are necessary to achieve reclamation in accordance with the purposes of this article, taking into consideration the physical, climatological, and other characteristics of the site.

As added by P.L.1-1995, SEC.27. Amended by P.L.179-1995, SEC.6.

# IC 14-34-10-3

# **Exemptions**

- Sec. 3. (a) This section does not apply to the following:
  - (1) A permittee of a surface coal mining operation that is mining on flat or gently rolling terrain with an occasional slope as described in subsection (b) through which the coal mining operation is to proceed.
  - (2) A permittee in compliance with section 4 of this chapter.
- (b) In addition to the requirements of section 2 of this chapter, a permittee operating a surface coal mining and reclamation operation on a slope of at least twenty degrees  $(20^{\circ})$ , unless the director establishes a lesser slope after consideration of Indiana's soil, climate, and other pertinent characteristics, shall do the following:
  - (1) Ensure that, when performing surface coal mining on steep slopes, debris, abandoned or disabled equipment, spoil material, or waste mineral matter is not placed on the downslope below the bench or mining cut. However, spoil material exceeding that required for the reconstruction of the approximate original contour under:
    - (A) section 2(b)(4) of this chapter; or
    - (B) subdivision (2);

shall be permanently stored under section 2(b)(25) of this chapter.

- (2) Complete backfilling with spoil material that:
  - (A) maintains stability following mining and reclamation; and
  - (B) completely covers the highwall;

and return the site to the approximate original contour.

(3) Not disturb land above the top of the highwall unless the director finds the disturbance will facilitate compliance with the standards of this chapter. However, the land disturbed above the highwall is limited to that amount necessary to facilitate compliance with those standards.

As added by P.L.1-1995, SEC.27.

## IC 14-34-10-4

# Mining permitted without regard to restoring land to original contour

- Sec. 4. (a) The director may, under procedures established by rule, permit surface coal mining operations if:
  - (1) an industrial, a commercial, an agricultural, a residential, a recreational, or a public facility is proposed for the postmining use of the affected land; and
  - (2) the mining operation will remove an entire coal seam running through the upper fraction of a ridge or hill, except as provided in subsection (c)(1), by:
    - (A) removing all of the overburden; and
    - (B) creating a level plateau or a gently rolling contour;
      - (i) with no highwalls remaining; and
      - (ii) capable of supporting the postmining uses listed in subdivision (1);

without regard to the requirement to restore the affected land to the approximate original contour as set forth in section 2(b)(4), 3(b)(2), or 3(b)(3) of this chapter.

- (b) The director may permit the proposed uses under subsection (a) only if the following conditions are met:
  - (1) After consultation with the appropriate land use planning agencies, if any, the proposed postmining land use is considered an equal or a better economic or public use of the affected land compared with the premining use.
  - (2) The applicant presents specific plans for the proposed postmining land use and appropriate assurances that the use meets the following conditions:
    - (A) The use is compatible with adjacent land uses.
    - (B) The use is obtainable according to data regarding expected need and market.
    - (C) The use is assured of investment in necessary public facilities.
    - (D) The use is supported by commitments from public agencies where appropriate.
    - (E) The use is practicable with respect to private financial capability for completion of the proposed use.
    - (F) The use is planned according to a schedule attached to the reclamation plan so as to integrate the mining operation and reclamation with the postmining land use.
    - (G) The use is designed by an engineer licensed under IC 25-31 and in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site.
  - (3) The proposed use is consistent with adjacent land uses and existing state and local land use plans and programs.
  - (4) The governing body of the unit of general purpose government in which the land is located and a state or federal agency that the director determines to have an interest in the proposed use is provided an opportunity of not more than sixty

- (60) days to review and comment on the proposed use.
- (5) All other requirements of this article are met.
- (c) With respect to a permit granted under subsection (a) and in addition to other requirements the commission establishes by rule, the director shall require the following:
  - (1) The toe of the lowest coal seam and the overburden associated with the seam are retained in place as a barrier to slides and erosion.
  - (2) The reclaimed area is stable.
  - (3) The resulting plateau or rolling contour drains inward from the outslopes except at specified points.
  - (4) No damage is done to natural watercourses.
  - (5) Spoil is placed on the hilltop bench as is necessary to achieve the planned postmining land use and the operator places all excess spoil material not retained on the hilltop in accordance with section 2(b)(25) of this chapter.
  - (6) The operator ensures stability of the spoil retained on the hilltop and meets all other requirements of this article.
- (d) The director shall review all permits issued under this section not more than three (3) years from the date of issuance unless the applicant affirmatively demonstrates that the proposed development is proceeding in accordance with the terms of the approved schedule and reclamation plan.

As added by P.L.1-1995, SEC.27.

## IC 14-34-10-5

#### **Conditions for variance**

- Sec. 5. (a) The director may grant a variance from the requirement to restore to approximate original contour set forth in section 3(b)(2) of this chapter if the following conditions exist:
  - (1) After approval of the appropriate state environmental agencies, the watershed control of the area is improved.
  - (2) Complete backfilling with spoil materials that maintains stability following mining and reclamation is required to completely cover the highwall.
  - (3) The owner of the surface knowingly requests in writing, as a part of the permit application, that a variance be granted so as to make the land, after reclamation, suitable for an industrial, a commercial, a residential, a public, or a recreational use.
  - (4) After consultation with the appropriate land use planning agencies, if any:
    - (A) the potential use of the affected land constitutes an equal or a better economic or public use; and
    - (B) the variance is designed and certified by a professional engineer licensed under IC 25-31 and is in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site.
- (b) With respect to a variance granted under subsection (a) or under IC 13-4.1-8-4(a) (before its repeal) and in addition to other

requirements the commission establishes by rule, the director shall require the following:

- (1) Only the amount of spoil will be placed off the mine bench as is necessary to achieve the planned postmining land use.
- (2) Stability of the spoil retained on the bench is ensured.
- (3) All spoil placement off the mine bench must comply with section 2(b)(25) of this chapter.
- (c) The director shall review all exceptions granted under this section not more than three (3) years after the date of issuance of the permit unless the permittee affirmatively demonstrates that the proposed development is proceeding in accordance with the terms of the reclamation plan.

As added by P.L.1-1995, SEC.27.